A METHOD FOR MULTICAST SERVICE IN A CROSSBAR SWITCH

ABSTRACT

     A method efficiently multicasts data within a crossbar switch based structure.

5   Multicasting is achieved with effective prioritization of multicast data with respect to unicast data and other multicast data, yet does not unnecessarily delay unicast traffic. The method for multicast service in a crossbar switch effectuates the transfer of data between a single input queue and a multiplicity of output ports and reconfigures the crossbar switch accordingly. A primacy is assigned to data cells based upon their designation as multicast

10   cells that hightens their service priority with respect to cells that are to be unicasted. To prioritize multicast cells for service with respect to other multicast cells, a comparison of assigned priorities is made. While multicast cells have priority in one embodiment over unicast cells, unicast cells can be transferred during multicast iterations during pauses in multicast data transfer.